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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/599,022	06/21/2000	Kazunori Abe	OGA-172-USAP	6432

7590 04/22/2004  
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EXAMINER

WONG, ALLEN C

ART UNIT	PAPER NUMBER
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2613

DATE MAILED: 04/22/2004

4

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/599,022

Applicant(s)

ABE ET AL.

Examiner

Allen Wong

Art Unit

2613

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-4 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1, 2 and 4 is/are rejected.
- 7) ☒ Claim(s) 3 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 2.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_.

## DETAILED ACTION

### *Drawings*

1. The drawings are objected to because of the minor spelling errors where in figures 1-3, the word "DILAY" should be changed to "DELAY". A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

### ***Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1 and 4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Eino (4,807,025) in view of Takayama (4,291,961).

Regarding claim 1, Eino discloses an electronic endoscope system (fig.2) comprising:

an electronic endoscope to whose front end an imaging device is set (fig.2, element 10 where CCD 12 is an imaging device);

a processor unit connected with the electronic endoscope to apply a predetermined signal processing to a video signal output from the imaging device (fig.2, element 28 is a processor that processes the endoscopic information as obtained by element 26 and also connected to the display output 30);

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a reference-delay-time generation circuit for generating a signal having a rough reference delay time (fig.2, element 80 generates a signal having rough reference delay time); and

a control circuit for generating a delay signal corresponding to a length of the electronic endoscope in cooperation with the delay-time generation circuit and controlling image processing in accordance with the delay signal (see col.7, ln.52-65 and fig.2, element 32 functions with the delay lines unit 80 to generate a delay signal corresponding to a length of the endoscope, and that the delay signal(s) are eventually sent to the video processor 28 for image processing).

Eino does not specifically disclose a short-delay-time generation circuit for generating a signal having a delay time shorter than a reference delay time of the reference-delay-time generation circuit. However, Takayama teaches a short-delay-time generation circuit for generating a signal having a delay time shorter than a reference delay time of the reference-delay-time generation circuit (fig.3, note the second delay signal is shorter than the first delay signal or the reference delay signal). Therefore, it would have been obvious to one of ordinary skill in the art to incorporate the teachings of Eino and Takayama as a whole for accurate light and exposure control during the gathering of endoscopic image data (Takayama col.2, ln.32-34). Doing so would yield accurate, high quality images for viewing during examinations of various organs.

Regarding claim 4, Eino discloses wherein the control circuit is set to a processor unit, reads delay-time data for a connected electronic endoscope from the electronic

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endoscope, and generates a necessary delay signal in accordance with the delay-time data (note in fig.2, element 32 functions with the delay lines unit 80 to generate the necessary delay signal(s) corresponding to a length of the endoscope, and that the delay signal(s) are eventually sent to the video processor 28 for image processing where the delay time data is taken into account before producing the final output image at display 30).

3. Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Eino (4,807,025) and Takayama (4,291,961) as applied to claim 1 above, and further in view of Inaba (5,331,961).

Regarding claim 2, Eino and Takayama are silent about the limitation of wherein the short-delay-time generation circuit is provided with a plurality of gate delay devices to set a short delay time according to a delay of a signal passing through the gate delay devices. However, Inaba suggests that gates can be used to provide short delay time signals (col.4, ln.45-50, the gate delay generator can delay signals for short or long periods of time depending on the application). Therefore, it would have been obvious to one of ordinary skill in the art to combine the teachings of Eino, Takayama and Inaba as a whole for properly delaying the signals so as to obtain a more accurate image of the captured endoscopic scene.

***Allowable Subject Matter***

4. Claim 3 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

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The following is a statement of reasons for the indication of allowable subject matter: the prior art does not specifically disclose the combination of limitations as claimed in claim 3: wherein the control circuit has a first multiplexer for selecting any one of a plurality of drive clock signals generated by the reference-delay-time generation circuit and respectively having a reference delay time and a second multiplexer for selecting any one of a plurality of drive clock signals respectively generated by the short-delay-time generation circuit and respectively having a short delay time, and a delay time corresponding to the length of the electronic endoscope is obtained by controlling the first and second multiplexers.

***Contact Information***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Allen Wong whose telephone number is (703) 306-5978. The examiner can normally be reached on Mondays to Thursdays from 8am-6pm.

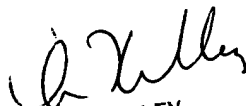
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Christopher Kelley can be reached on (703) 305-4856. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Allen Wong  
Examiner  
Art Unit 2613

AW  
4/15/04

  
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